

MAGNETIC END EFFECTORS FOR SPACE OPERATIONS

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HBS: ONLY
146775

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The Magnetic End Effector (MEE) to be flown as part of the Dexterous End Effector (DEE) flight experiment has been designed to operate with the Shuttle Remote Manipulator System (SRMS). Grappling or attachment of payloads is accomplished magnetically with two fault tolerant operation. The small magnetic grapple plate weighs far less than the standard grapple fixture; allows stacking and close spacing of payloads and eliminates secondary release mechanisms. In addition to specifics regarding the MEE, the DEE project, Magnetic Attachment Tool (MAT), RMS-Force Torque Sensor (RMS-FTS) and Targeting and Reflective Alignment Concept (TRAC) will be discussed.